

Amendments to the Claims:

1-10. (Cancelled)

11. (Currently amended) A substantially isolated nucleic acid sequence encoding a polypeptide derived from the carboxy-terminal 549 amino acids of HEV open reading frame 2,

wherein the amino acid sequence of said polypeptide is selected from the group consisting of: SEQ ID NO: 15, SEQ ID NO: 16, sequences having the amino acid terminus of SEQ ID NO: 15 or SEQ ID NO: 16 and a deletion of up to 24 amino acids from the carboxy terminus, and sequences at least 70% homologous thereto.

12. (Currently amended) An expression vector for producing a Hepatitis E Virus polypeptide antigen composition, comprising[[,]]

a nucleic acid sequence ~~encoding a polypeptide derived from the carboxy terminal 549 amino acids of HEV open reading frame 2~~ as recited in claim 11, said nucleic acid sequence inserted into an expression vector, where said nucleic acid sequence is operably linked to a promoter able to initiate transcription in a selected host cell.

13. (Currently amended) An expression system for producing a Hepatitis E Virus polypeptide antigen composition, comprising[[,]]

a nucleic acid sequence ~~encoding a polypeptide derived from the carboxy terminal 549 amino acids of HEV open reading frame 2~~ as recited in claim 11, said nucleic acid sequence inserted into an expression vector, wherein said nucleic acid sequence is operably linked to a promoter able to initiate transcription in a selected host cell, and said expression vector is carried within the host cell.

14. (Original) An expression system of claim 13, where said expression vector is a baculovirus expression vector and said host cell is an insect cell.

15-17. (Cancelled)

18. (Previously presented) A method of producing a Hepatitis E Virus (HEV) polypeptide composition, comprising the steps of:

culturing a cell containing the expression vector of claim 12 under conditions sufficient to express a polypeptide sequence encoded by said nucleic acid.

19. (Withdrawn) A method of detecting hepatitis E virus infection in an individual, comprising:

a) reacting a serum sample taken from the individual with the Hepatitis E Virus (HEV) polypeptide composition of claim 1; and

b) examining a polypeptide of the composition for the presence of bound antibody.

20. (Withdrawn) The method of claim 18, wherein polypeptides of the HEV polypeptide composition are attached to a solid support, said reacting includes contacting such serum with the support and said examining includes reacting the support and bound antibody with a reporter-labeled anti-human antibody.

21. (Withdrawn) A kit for ascertaining the presence of antibodies to HEV in a serum sample taken from an individual, comprising:

a solid support with surface-bound antigens wherein the surface-bound antigens are polypeptides of the HEV polypeptide composition of claim 1.

22. (Withdrawn) A vaccine composition used in immunizing an individual against Hepatitis E Virus (HEV) comprising,

an HEV polypeptide composition of claim 1 in a pharmacologically acceptable carrier.

23. (Withdrawn) A vaccine composition of claim 22, where at least one polypeptide of the composition has an amino acid sequence selected from the group consisting of SEQ ID NO:15, SEQ ID NO:16, SEQ ID NO:25, SEQ ID NO:26, SEQ ID NO:27, SEQ ID NO:28, and homologous sequences therewith.

24. (Withdrawn) A method of inhibiting infection of an individual by HEV, comprising:

administering to the subject a vaccine composition of claim 22 in a therapeutically effective

amount.

25. (New) The nucleic acid sequence of claim 11, wherein said amino acid sequence of said encoded polynucleotide having the amino acid terminus of SEQ ID NO: 15 or SEQ ID NO: 16 and a deletion of up to 24 amino acids from the carboxy terminus is selected from the group consisting of SEQ ID NOs: 25, 26, 27 and 28.